

**From:** Robin Costas/ESC/R3/USEPA/US  
**Sent:** 4/16/2012 4:07:15 PM  
**To:** Cynthia Caporale/ESC/R3/USEPA/US@EPA  
**CC:**  
**Subject:** draft response to Verification report 1203001

The report on the Dimock Verification/Completeness Check for file 1203001 FINAL R33907 04 02 12 1502.pdf was reviewed and below are the responses for your consideration.

File 1203001 FINAL R33907 04 02 12 1502.pdf

1. For VOCs, the following qualifications should be applied to the following samples as noted based on the blank results (method, field, trip in that order) in accordance with the National Functional Guidelines: Acetone 2.00U for samples HW61-P, HW61z and HW50.

**Response:** Elevating the QL and qualifying "U" is not the typical procedure for R3 validation; however, if appropriate for this project we support that decision.

2. For VOC analysis, precision and accuracy data for cyclohexane, Freon 113, methylacetate, methylcyclohexane or MTBE are not included in the laboratory report in Batch BC21301. All recoveries need to be provided to determine if these compounds are within QC criteria.

**Response:** The MS/MSD precision and accuracy data for these compounds are within QC criteria. The results are cyclohexane 112% and 101% recoveries (RPD=10), Freon 113 107% and 97% recoveries (RPD=9%), Methyl Acetate 103% and 87% recoveries (RPD=17), Methylcyclohexane 110% and 99% recoveries (RPD=11), and MTBE 93% and 85% recoveries (RPD=10).

3. For VOC analysis, bromomethane, chloromethane and dichlorodifluoromethane recoveries for the 5 ppb LCS exceeded the QC recovery criterion of 80-120%. Since these compounds are non-detect, no further qualification is necessary.

**Response:** We agree

4. For SVOCs, the following qualifications should be applied to the following samples as noted based on the blank results (method, field, in that order) in accordance with the National Functional Guidelines: Bis-2-ethylhexylphthalate 5.00U for samples HW60, HW56, FB20, HW61-P, HW61z, HW61, FB21, HW50; butylbenzylphthalate 5.00U for samples HW60, HW56, FB20, HW61-P, HW61z and HW61; diethylphthalate for samples FB18, HW60, HW56, FB20, HW61-P, FB21 and HW50; and, di-n-butylphthalate for samples FB19, HW60, HW56, FB20, HW61-P, HW61z, HW61, FB21 and HW50.

**Response:** Elevating the QL and qualifying "U" is not the typical procedure for R3 validation; however, if appropriate for this project we support that decision.

5. For SVOC analysis, the 2,4-dinitrotoluene recoveries for BS2 in Batch BC20802, BS2 in Batch BC21202 and the MS/MSD for sample HW56 exceeded the QC recovery limit. Since this compound was not detected in any of the samples, no further qualification is required.

**Response:** We agree.

6. For SVOC analysis, the case narrative states that the quantitation levels for 2,4-dinitrophenol for all samples and benzo(k) fluoranthene for most samples are qualified "UJ" due to exceeding calibration limits. Please supply the %RSD and/or %D for these compounds to verify the qualifications.

**Response:** For samples FB19, HW60, HW56, FB20, HW61-P, HW61z and HW61, the RSD for 2,4-dinitrophenol is 51.29% and benzo(k) fluoranthene is 22.18% RSD. The %D for CCV for 2,4-dinitrophenol is 37.5%  
For samples FB21 and HW50, the RSD for 2,4-dinitrophenol is 41.96 % and the %D is 75.0% for the CCV.

7. For SVOC analysis, the case narrative states that 2,4-dinitrophenol quantitation limits are raised to the mid-level value due to 0% recovery of the low and mid-low spikes. Please confirm that this statement applies to both the samples in Batch BC20802 (samples FB19, HW60, HW56, FB20, HW61-P, HW61z and HW61) and Batch 21202 (FB21 and HW50) to verify the qualifications.

**Response:** For samples FB19, HW60, HW56, FB20, HW61-P, HW61z and HW61, there was 0% recovery in low spike, very low

in mid-low spike (20 ug/L) but, okay at mid-spike (40 ug/L). For samples FB21 and HW50, there was 0% recovery in low spike and 0% in the mid-low spike but okay at mid-spike (40ug/L). So we agree with raising the QL for all these samples.

8. For SVOC analysis, the case narrative states that 4,6-dinitro-2-methylphenol quantitation limits are qualified "UJ" due to low recovery in BS1. Please confirm that this statement applies to both the samples in Batch BC20802 (samples FB19, HW60, HW56, FB20, HW61-P, HW61z and HW61) and Batch 21202 (FB21 and HW50) to verify the qualifications.

**Response:** The BS recovery for 4,6-dinitro-2-methylphenol is 27% for samples FB19, HW60, HW56, FB20, HW61-P, HW61z and HW61 and 18% for samples FB21 and HW50 at the low spike so we agree with the "UJ" qualifier and applies to all these samples.

9. For ICP metals analysis, the case narrative states that several samples (HW61 and HW50) for tin were qualified due to a QC samples outside of acceptance limits. Please indicate which QC sample is outside of criteria. The QC listed in the laboratory report is within acceptance criteria.

**Response:** The continuing calibration verification standards (CCVs) were failing low towards the end of the analytical run for tin only.

10. For ICP-MS metals analysis, the case narrative states that uranium for sample HW50 is qualified "UJ" due to the absence of a second source QC sample. Please supply justification for the qualification of only one sample (HW50) in the batch. If there is no second source standard for the batch, then all samples should be qualified.

**Response:** Sample HW50 was analyzed separately in a later analytical run because of problems with instrument QC in the original run. Only HW50 was impacted. The second source QC sample was mistakenly omitted on this second run.

11. For nitrate/nitrite and chloride, several samples were qualified "B" based on the level of field blank contamination. Please confirm that the RL will be raised to the level found in the associated field blank and a "U" qualifier assigned to be consistent with previous qualifications of inorganic data (i.e., TDS and Cu).

**Response:** Correct.

12. It is assumed that all required instrument QC (RSD, %D, minimum response factors, etc.) specified by the method was run and was either within the criteria listed in the EPA R3 SOPs or qualified based on any deficiencies.

**Response:** Correct.

robin

Robin Costas, Chemist  
EPA Region 3, OASQA  
Ft. Meade, Md 20755  
410-305-2659